



PERMIT NO. ALS000032

Post-Construction Stormwater Management in Qualifying New Development & Redevelopment

Permit Part II B.5.



POST-CONSTRUCTION STORMWATER MANAGEMENT IN QUALIFYING NEW DEVELOPMENT & REDEVELOPMENT

PERMIT PART II B.5.

It is a policy of the City of Birmingham to promote safe, secure and sustainable communities. State and City policy also provides for the prevention, abatement and control of new or existing water pollution (Alabama Code §22-22-2). Post-construction stormwater management refers to the activities that take place after construction occurs, and includes structural and non-structural controls including low impact development (LID) and green infrastructure (GI) practices, water quality and flood control practices to obtain permanent stormwater management over the life of the property's use.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM SUMMARY

To meet the requirements of the City's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit, effective on March 1, 2018, the City is developing a post construction program including a Post Construction Ordinance, Design Manual and Maintenance Manual. The Ordinance and Design Manual are completed in Draft form and are pending City Council Adoption. These documents as well as Public Stakeholder comments are available on the City web site at the following link: <https://www.birminghamal.gov/storm-water-management/post-construction/>

The Maintenance Manual is under development and will be available to Stakeholders for review and will be presented to the City Council for adoptions in February of 2019.

Post-Construction Structural Control Features Promoted:

- ❖ Bioretention Areas
- ❖ Downspout Disconnection
- ❖ Dry Extended Detention Ponds
- ❖ Enhanced Swales
- ❖ Grass Channels
- ❖ Gravity Separators
- ❖ Green Roofs
- ❖ Infiltration Trenches
- ❖ Permeable Pavement
- ❖ Litter Removal
- ❖ Manufactured Treatment Devices
- ❖ Underground and Above ground Sand Filters
- ❖ Reforestation
- ❖ Sheet Flow
- ❖ Storm Water Wetland
- ❖ Submerged Gravel Wetlands
- ❖ Underground Detention
- ❖ Urban Bioretention
- ❖ Wet Stormwater Retention Ponds



The program includes at a minimum, the following elements:

- ✓ Require landowners and developers to develop and implement site plan review and enforcement procedures for qualifying new and (re)development sites;
- ✓ Require landowners and developers to develop and maintain BMPs to ensure that post-construction runoff mimics pre-construction site hydrology; Require landowners and developers to incorporate LID/GI where feasible;
- ✓ Adopt or amend an ordinance to ensure applicability and enforceability of post-construction BMPs for all new qualifying development and redevelopment projects;
- ✓ Require post-construction BMP plan review process;
- ✓ Require “as-built” certification of post-construction BMPs;
- ✓ Perform post-construction inspections periodically to ensure continued compliance with approved BMP controls;
- ✓ Require post-construction maintenance inspection and activities be routinely provided to the City;
- ✓ Require long-term maintenance agreements

PROCEDURES TO DEVELOP, IMPLEMENT, AND ENFORCE STRUCTURAL AND NON-STRUCTURAL BMP CONTROLS:

The City of Birmingham has developed a Post Construction Ordinance, Design Manual and procedures to implement a program to require all qualifying sites to provide post construction BMPs to meet the standards outlined in the ordinance and manual.

PROCEDURES FOR ENCOURAGEMENT OF THE UTILIZATION OF LID/GI PRACTICES:

The procedures outlined in the Post Construction Manual require all qualifying sites to consider GI/LID BMPs. If due to project limitations GI/LID is not practical, 80% TSS removal is required as the best measure practical.

PROCEDURES TO ENSURE COMPLIANCE WITH THE ORDINANCE OR REGULATORY MECHANISM, INCLUDING THE SANCTIONS AND ENFORCEMENT MECHANISMS USED TO ENSURE COMPLIANCE:

Enforcement and compliance mechanisms including enforcement mechanisms to ensure compliance are included in the Post Construction Ordinance.

PROCEDURES FOR POST-CONSTRUCTION INSPECTIONS, INCLUDING TRACKING AND ENFORCEMENT:

All Post-Construction BMPs will be inspected annually to ensure continued maintenance. Record drawings will be required as part of the Maintenance Agreement, and the locations will be mapped. All inspections will be tracked.

PROCEDURES TO ENSURE ADEQUATE LONG-TERM OPERATION AND MAINTENANCE OF BMPs:

All projects with post construction storm water BMPs for both water quality and flood control management will be required to execute a Maintenance Agreement with a schedule of maintenance actions and time table for owner inspections and maintenance actions. The City will provide Regulatory Inspections

DEVELOP AN INVENTORY OF POST-CONSTRUCTION STRUCTURAL CONTROLS:

All post development qualifying facilities both public and private will be inventoried and the locations type control, and ownership information will be tracked and maintained on the City GIS system.

